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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,760	06/27/2003	Marc Andre Boillot	CE10967J1016 Boillot, Mar	7406

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EXAMINER

WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
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2626

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/607,760

Applicant(s)

BOILLOT ET AL.

Examiner

JAMES S. WOZNAK

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the office action from 9/26/2007, the applicant has submitted a request for continued examination, filed 2/26/2008, amending independent claims 1, 10, and 17, while arguing to traverse the art rejection based on the limitation regarding selectable rate variable being selected by another calling party (*Amendment, Page 9*). The applicant's arguments have been fully considered but are moot with respect to the new grounds of rejection in further view of Nejime et al (*U.S. Patent: 5,717,818*).

Response to Arguments

2. Applicant's arguments have been fully considered but they are not persuasive for the following reasons:

With respect to **Claims 17-22**, the applicants argue the issue of new matter because the specification clearly conveys to one of skill in the art that the applicants were in possession of subject matter encompassed by the terms "tangibly embodied" and "program storage device" because the specification recites a computer/computer readable storage medium and these recitations fall within the scope of the claimed terms (*Amendment, Pages 8-9*).

In response, the examiner notes the previous 35 U.S.C. 112, first paragraph rejection is maintained because the specification makes no mention of the terms "tangibly embodied" and

“program storage device”. Since these terms are not mentioned in the specification and they are likewise not defined, the scope of these terms is also not supported. Thus, since there is no support in the specification for these terms, the previous 35 U.S.C. 112 first paragraph rejection is maintained. The applicant is correct that the specification does recite a computer and computer readable medium (*which are not defined by the terms “program storage device” and “tangibly embodied”*), so it is suggested that these terms should be added to claims 17-22 in order to overcome the new matter rejection, however, such an amendment would result in a 35 U.S.C. 101 rejection because the scope of the “computer readable medium” encompasses non-tangible types (*i.e., wireless interface*).

The applicants’ arguments directed towards the independent claims that Okuda et al (*U.S. PG Publication: 2004/0179676*) fails to teach another party selecting a talking rate adjustment (Amendment, Page 9) have been fully considered, but are moot with respect to the new grounds of rejection in further view of Nejime et al (*U.S. Patent: 5,717,818*).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claims 17-22** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

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the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, the term “program storage device” is not defined in the specification, thus raising an issue of new matter. Although the specification describes the storage of computer programs on a “computer readable medium”, the term “program storage device” is not used to define these mediums. Also, the term “tangibly embodied” is not defined in the specification. Although computer readable mediums are defined in the specification that can be considered to have program instructions “tangibly embodied” thereupon, such a term is not used to describe encoding a program upon a computer readable medium. Since the only tangible medium disclosed by the specification is a “floppy disk” (*Page 8*), the examiner recommends amending claim 17 to state –A floppy disk containing programming instructions-- to overcome this new matter rejection.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 1-16** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements in claims 1 and 10 are: an element that enables another party to selecting a rate variable. An audio loopback path cannot control this rate on its own. The remaining dependent claims fail to overcome the aforementioned rejection, and thus, are also rejected under 35 U.S.C. 112, second paragraph.

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7. **Claims 17-22** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: a step of another party selecting a rate variable. A rate cannot be adjusted by the variable if it has not first been selected by the user. The remaining dependent claims fail to overcome the aforementioned rejection, and thus, are also rejected under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-4, 7, 10-13, and 17-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al (*U.S. Patent App. Publication: 2004/0179676*) in view of Nejime et al (*U.S. Patent: 5,717,818*).

With respect to **Claim 1**, Okuda discloses:

An audio input module for receiving audio from a user speaking at an undesired speaking rate (*microphone in a telephone handset of a calling party, Paragraph 0034*);

An audio output module for rendering audio to the user (*loudspeaker in a telephone handset of a calling party, Paragraph 0034*);

An audio loopback path to present audio from the audio input module to the audio output module so as to be heard by the user during the call between the user and another party (*reduced sidetone signal played to a calling party during a telephone conversation, Paragraph 0039 and 0044; and Fig. 3*); and

Wherein the audio loopback path presents audio at a loopback rate depending upon a selectable rate variable to impose an altered talking rate on the user speaking at the undesired speaking rate (*structure for setting a desired voice speed conversion in a loopback path, Paragraphs 0041-0042 and Fig. 3, Element 5, that would include the user's reduced sidetone signal. Since the teachings of Okuda meet the loopback structure required by the claimed invention, it would inherently flow naturally from the teachings of Okuda that a user would be imposed to adjust their conversation speaking rate because they would be hearing their rate-adjusted voice as is also recited in the claimed invention (i.e., claimed intended result that flows from the claimed loopback path with a rate adjustment).*).

Although Okuda teaches the ability to adjust their own voice playback rate, Okuda does not explicitly state that another caller can adjust the speech playback rate. Nejime, however, discloses a speech rate conversion means that may be adjusted by an elderly speaker to slow the speech of another speaker (*rate selector, Col. 13, Lines 7-23 and 59-67*). Nejime further teaches the implementation of such a device in a telephone system (*Fig. 36*). In such a system, a different party (i.e., the elderly individual) can adjust the of speech playback rate of a first caller, which is fed back to that user (*"voice [adjusted by the aged individual] is fed back to the speaker side", Col. 31, Lines 17-22*).

Okuda and Nejime are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda with the first caller feedback taught by Nejime in order to prevent communication difficulties experienced in speaking with an aged person (*Col. 31, Lines 17-22*).

With respect to **Claim 2**, Okuda further discloses:

The audio input module receives speech audio at a given speaking rate and wherein the loopback rate alters the speaking rate in the audio loopback path (*user reduced sidetone is rate-adjusted, Paragraphs 0039-0041; and Fig. 3, Element 5*).

With respect to **Claim 3**, Nejime further discloses that the pitch is not altered in speed rate adjustment (*Abstract*).

With respect to **Claim 4**, Okuda further discloses:

User interface for selectively adjusting the selectable rate variable (*user control unit for setting a voice speed, Paragraph 0034*).

With respect to **Claim 7**, Okuda further discloses:

A memory location to store a rate variable for a given user (*user rate adjust microcomputer that would inherently require some type of storage of a user-selected playback rate in order to process speech samples, Paragraph 0034*).

With respect to **Claim 10**, Okuda discloses:

A first handset for use by a first user (*telephone handset of a calling party, Paragraph 0034*);

A second handset for use by a second user, wherein audio captured from the first user at the first handset is presented to the second user at the second handset through a communication infrastructure (*telephone handset of a called party, 0034-0037; and telephone communication infrastructure, Paragraphs 0035 and 0040; and Fig. 3*);

Wherein the audio captured from the first user at the first handset is also presented to the first user through a loopback path to an earpiece in the first handset during a call between the first handset and the second handset (*reduced sidetone signal played to a telephone calling party, Paragraphs 0039 and 0044*); and

Wherein the loopback path includes a loopback rate for speech audio with a selectable rate variable to impose an altered talking rate on the user speaking at the undesired speaking rate (*structure for setting a desired voice speed conversion in a loopback path, Paragraphs 0041-0042 and Fig. 3, Element 5, that would include the user's reduced sidetone signal. Since the teachings of Okuda meet the loopback structure required by the claimed invention, it would inherently flow naturally from the teachings of Okuda that a user would be imposed to adjust their conversation speaking rate because they would be hearing their rate-adjusted voice as is also recited in the claimed invention (i.e., claimed intended result that flows from the claimed loopback path with a rate adjustment).*).

Although Okuda teaches the ability to adjust their own voice playback rate, Okuda does not explicitly state that another caller can adjust the speech playback rate. Nejime, however, discloses a speech rate conversion means that may be adjusted by an elderly speaker to slow the speech of another speaker (*rate selector, Col. 13, Lines 7-23 and 59-67*). Nejime further teaches the implementation of such a device in a telephone system (*Fig. 36*). In such a system, a

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different party (i.e., the elderly individual) can adjust the of speech playback rate of a first caller, which is fed back to that user (*"voice [adjusted by the aged individual] is fed back to the speaker side", Col. 31, Lines 17-22*).

Okuda and Nejime are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda with the first caller feedback taught by Nejime in order to prevent communication difficulties experienced in speaking with an aged person (*Col. 31, Lines 17-22*).

With respect to **Claim 11**, Okuda further discloses:

User interface for selectively adjusting the selectable rate variable (*user control unit for setting a voice speed, Paragraph 0034*).

With respect to **Claim 12**, Okuda further discloses:

A memory location to store a rate variable for a given user (*user rate adjust microcomputer that would inherently require some type of storage of a user-selected playback rate in order to process speech samples, Paragraph 0034*).

With respect to **Claim 13**, Okuda discloses the second handset as applied to Claim 10 and the user rate adjust microcomputer as applied to Claim 12.

With respect to **Claim 17**, Okuda discloses:

During a call between a user of the communication unit and another party, capturing speech audio from the user of the communication unit in a loopback path between an audio input module and an audio output module, wherein the loopback path presents speech audio received at the audio input module to the audio output module user to hear (*reduced sidetone signal*

captured and played to a calling party during a telephone conversation, Paragraph 0039 and 0044; and Fig. 3); and

When the user of the communication unit is speaking at an undesired speaking rate, adjusting the speech audio from the user of the communication unit captured in the loopback path based upon a selectable rate variable to impose an adjusted speaking rate on the user of the communication unit (*setting a desired voice speed conversion in a loopback path, Paragraphs 0041-0042 and Fig. 3, Element 5, that would include the user's reduced sidetone signal. Since the teachings of Okuda meet the loopback required by the claimed invention, it would inherently flow naturally from the teachings of Okuda that a user would be imposed to adjust their conversation speaking rate because they would be hearing their rate-adjusted voice as is also recited in the claimed invention (i.e., claimed intended result that flows from the claimed loopback path with a rate adjustment).*)

Okuda further discloses method implementation as a program stored in a microcomputer (*Paragraph 0034*), which would inherently require some type of storage medium for program execution.

Although Okuda teaches the ability to adjust their own voice playback rate, Okuda does not explicitly state that another caller can adjust the speech playback rate. Nejime, however, discloses a speech rate conversion means that may be adjusted by an elderly speaker to slow the speech of another speaker (*rate selector, Col. 13, Lines 7-23 and 59-67*). Nejime further teaches the implementation of such a device in a telephone system (*Fig. 36*). In such a system, a different party (i.e., the elderly individual) can adjust the of speech playback rate of a first caller,

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which is fed back to that user (*"voice [adjusted by the aged individual] is fed back to the speaker side", Col. 31, Lines 17-22*).

Okuda and Nejime are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda with the first caller feedback taught by Nejime in order to prevent communication difficulties experienced in speaking with an aged person (*Col. 31, Lines 17-22*).

Claim 18 contains subject matter similar to claim 2, and thus, is rejected for the same reasons.

Claim 19 contains subject matter similar to claim 3, and thus, is rejected for the same reasons.

Claim 20 contains subject matter similar to claim 11, and thus, is rejected for the same reasons.

10. **Claims 6 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al in view of Nejime et al and further in view of Rayskiy (*U.S. Patent: 6,278,387*).

With respect to **Claim 6**, Okuda in view of Nejime discloses the telephone loopback path featuring voice speed adjustment, as applied to Claim 3. Although Okuda discloses time-scale modification (Paragraph 0041), Okuda in view of Nejime does not explicitly recite that a SOLA function is utilized. Rayskiy, however, recites:

The audio path presents audio at a rate through a SOLA (Synchronized Overlap and Add) function (*time scaling of an audio signal using SOLA, Col. 6, Lines 5-22*).

Okuda, Nejime, and Rayskiy are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda in view of Nejime with the SOLA function that maintains pitch while performing a speech rate adjustment taught by Rayskiy in order to provide a means for enabling variable playback of audio signals without a depreciation in speech quality (*Rayskiy, abstract*).

Claim 22 contains subject matter similar to claim 6, and thus, is rejected for the same reasons.

11. **Claims 5, 8-9, 14-16, and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al in view of Nejime et al and further in view of Klejin (*U.S. Patent: 5,717,823*).

With respect to **Claims 5**, Okuda in view of Nejime discloses the means for audio rate adjustment as applied to Claim 3. Okuda in view of Nejime does not specifically suggest receiving audio and a rate variable set from a second audio handset, however Klejin recites receiving, at a first telephone, speech and rate setting information that originates from a different telephone (*Col. 11, Line 45- Col. 12, Line 31*).

Okuda, Nejime, and Klejin are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda in view of Nejime with the speech and rate setting receiving means taught by Klejin in order to achieve device implementation in a practical consumer communication environment (*Klejin, Col. 11, Lines 45-65*).

With respect to **Claim 8**, Klejin further discloses:

The audio output module further comprises a vocoder for detecting a word rate in the audio loopback path using: an energy decision metric, a voicing decision metric, or a tonality measure (*word rate detection in a vocoder using extracted speech parameters indicative of energy and voicing decision metrics, Col. 7, Lines 33-47; and Col. 9, Lines 22-48*).

With respect to **Claim 9**, Okuda discloses the rate adjustment storage as applied to Claim 7, while Klejin discloses the means for word rate detection as applied to Claim 8.

With respect to **Claim 14**, Okuda in view of Nejime discloses the means for audio rate adjustment as applied to Claim 10. Okuda in view of Nejime does not specifically suggest receiving audio and a rate variable set from a second audio handset, however Klejin recites receiving, at a first telephone, speech and rate setting information that originates from a different telephone (*Col. 11, Line 45- Col. 12, Line 31*).

Okuda, Nejime, and Klejin are analogous art because they are from a similar field of endeavor in speech rate conversion. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Okuda in view of Nejime with the speech and rate setting receiving means taught by Klejin in order to achieve device implementation in a practical consumer communication environment (*Klejin, Col. 11, Lines 45-65*).

With respect to **Claim 15**, Klejin further discloses:

The audio output module further comprises a vocoder for detecting a word rate in the audio loopback path using: an energy decision metric, a voicing decision metric, or a tonality

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measure (*word rate detection in a vocoder using extracted speech parameters indicative of energy and voicing decision metrics, Col. 7, Lines 33-47; and Col. 9, Lines 22-48*).

With respect to **Claim 16**, Okuda discloses the rate adjustment storage as applied to Claim 12, while Klejin discloses the means for word rate detection as applied to Claim 15.

Claim 21 contains subject matter similar to Claim 14, and thus, is rejected for the same reasons.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Andersen et al (*U.S. Patent: 4,550,425*)- discloses a system for adjusting a speech rate at a transmitter or receiver.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/James S. Wozniak/
James S. Wozniak
Patent Examiner, Art Unit 2626